Name: _____

Date: _____

Algebra 1B Pd: _____

Weekend Word Problem #3: Rock Climbing

The Situation: Megan and Chloe are rock-climbing. After two total hours of climbing and eating three packs of trail mix, the girls are at an altitude of four hundred feet. After six total hours of climbing and drinking one gallon of water, the girls are at an altitude of seven hundred feet.
1. **Circle the correct word in each set of parentheses:** Megan and Chloe's altitude is changing over time. Thus, altitude is the (dependent, independent) variable and time is the (dependent, independent) variable.
2. Find Megan and Chloe's rate of change.
3. Graph the situation. **Label your axes.**

4. If Megan and Chloe continue climbing at the same average rate of change, what altitude will they be at after eight and a half hours?

5. Describe, in your own words, how to find the rate of change given a real world situation. What variables must you first identify? Be as specific as possible. Write in complete sentences using algebraic terms.

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CHALLenge: At what altitude did Megan and Chloe begin the hike?